Claims

1. A light emitting apparatus equipped with a light emitting device which has an anode over a substrate having an insulation surface, a layer which includes an organic compound which is in contact with the anode, a cathode which is in contact with the layer including the organic compound, and

the light emitting apparatus characterized in that, in said layer including the organic compound, included is silicon with $1x10^{18}$-$5x10^{20}$ pieces/cm^{-3}, by SIMS measurement.

2. A film forming apparatus which evaporates an organic compound material from an evaporation source which was placed opposite to a substrate, to carry out film formation over said substrate, and

the film forming apparatus characterized in that, in a film forming chamber in which said substrate is placed, a deposition source which accommodates the organic compound material and means for heating the deposition source are provided, and

said film forming chamber is coupled to a vacuum pumping processing chamber which vacuates an inside of said film forming chamber, and has means which can introduce material gas.

3. A manufacturing apparatus which has a load chamber, a transfer chamber which was coupled to the load chamber, and a film forming chamber which was coupled to the transfer chamber, and

the manufacturing apparatus characterized in that said transfer chamber has a function of carrying out alignment of a mask and a substrate, and

in the film forming chamber in which said substrate is placed, a deposition source which accommodates an organic compound material and means for heating the deposition source are provided, and

said film forming chamber is coupled to a vacuum pumping processing chamber which vacuates an inside of said film forming chamber, and has means which can introduce material gas.

4. The manufacturing apparatus as set forth in Claim 2 or Claim 3, characterized in that said deposition source is movable in a X direction or a Y direction in the film forming chamber.

5. The manufacturing apparatus as set forth in any one of Claims 2 through 4, characterized in that, in said film forming chamber, means for heating said substrate is provided.

6. The manufacturing apparatus as set forth in any one of Claims 2 through 5, characterized in that said means which can introduce material gas is means which introduces radicalized material gas by plasma generating means.

7. The manufacturing apparatus as set forth in any one of Claims 2 through 5, characterized in that said material gas is one kind or plural kinds which were selected from monosilane, disilane, trisilane, SiF_4, GeH_4, GeF_4, SnH_4, CH_4, C_2H_2, C_2H_4, or C_6H_6.

8. A film forming method for having an organic compound deposited over a substrate which was placed in a film forming chamber, and

the film forming method characterized in that, on the occasion that an inside of said film forming chamber is made to be of higher pressure than $1x10^{-3}$Torr, and a film is formed over said substrate by having an organic compound material deposited from a deposition source which was placed opposite to the substrate, material gas is introduced into said film forming chamber at the same time.

9. A film forming method for having an organic compound deposited over a substrate which was placed in a film forming chamber, and

the film forming method characterized in that, on the occasion that an inside of

said film forming chamber is made to be of higher pressure than $1x10^{-3}$Torr, and a film is formed over said substrate by having an organic compound material deposited from a deposition source which was placed opposite to the substrate, radicalized material gas is introduced into said film forming chamber at the same time.

10. The film forming method as set forth in Claim 8 or Claim 9, characterized in that said material gas is one kind or plural kinds which were selected from monosilane, disilane, trisilane, SiF_4, GeH_4, GeF_4, SnH_4, CH_4, C_2H_2, C_2H_4, or C_6H_6.

11. A film forming method for having an organic compound deposited over a substrate which was placed in a film forming chamber, and

the film forming method characterized in that, on the occasion that an inside of said film forming chamber is made to be of higher pressure than $1x10^{-3}$Torr, and a film is formed over said substrate by having an organic compound material deposited from a deposition source which was placed opposite to the substrate, ionized material is evaporated by plasma at the same time, and over chemically attaching with said organic compound material, film formation is carried out over the substrate.

12. A cleaning method for removing an organic compound attached in a film forming chamber which had a deposition source, and

the cleaning method characterized in that, by generating plasma in the film forming chamber, or by introducing gas, which was ionized by plasma, into the film forming chamber, an inner wall, or anti-attachment preventing means for preventing a film from being formed over the inner wall, or a mask, is cleaned, and by vacuum pumping means, air is discharged.

13. The cleaning method as set forth in Claim 12, characterized in that said plasma is generated by exciting one kind or plural kinds of gasses which were selected from Ar, H, F, NF_3, or O.